

Amendments to the Claims

Claim 1 (Previously presented): A chipper-shredder machine for yard waste, comprising:  
a motor;  
a roller operatively driven by the motor;  
an inlet chute to feed yard waste to the roller so as to grind the yard waste into mulch; and  
an outlet chute to receive the mulch from the roller, the outlet chute being spring loaded.

Claim 2 (Original): The machine of claim 1 wherein the roller includes a plurality of teeth to feed the waste through the roller.

Claim 3 (Original): The machine of claim 1 wherein the roller has a torque of at least 2000 lb-in.

Claim 4 (Original): The machine of claim 3 wherein the roller operates at a speed of approximately 60 rpm.

Claim 5 (Original): The machine of claim 1 further comprising a speed reducer between the motor and the roller.

Claim 6 (Original): The motor of claim 1 wherein the motor is reversible.

Claim 7 (Cancelled).

Claim 8 (Original): The machine of claim 1 wherein the motor is electric.

Claim 9 (Original): The machine of claim 8 wherein the motor has an output power of approximately 1 to 2 horsepower.

Claim 10 (Original): The machine of claim 1 wherein the roller has two sets of differently shaped teeth to enhance grinding of the yard waste.

Claim 11 (Previously presented): A yard material mulching machine comprising:  
a feed chute with opposite inlet and outlet ends, and along which the yard material flows;  
the outlet end being spring loaded so as to reduce jams in the roller;  
a roller adjacent the feed chute; and  
a motor for rotating the roller such that the yard material is crushed between the roller and the feed chute and thereby reduced into mulch.

Claim 12 (Previously presented): The machine of claim 11 wherein the roller has a torque of at least 2000 lb-in.

Claim 13 (Original): The machine of claim 12 wherein the roller operates at a speed of approximately 60 rpm.

Claim 14 (Original): The machine of claim 11 further comprising a speed reducer between the motor and the roller.

Claim 15 (Original): The machine of claim 11 wherein the motor is reversible.

Claim 16 (Cancelled)

Claim 17 (Original): The machine of claim 11 wherein the motor is electrically powered.

Claim 18 (Previously presented): A method of reducing yard waste material into mulch, comprising:

feeding the yard waste material into an inlet chute;

crushing and grinding the yard waste material with a rotating roller; and

discharging the crushed yard waste material onto a spring loaded outlet chute that receives the crushed yard waste material from the rotating roller and that is biased toward the roller in order to inhibit jams in the roller.

Claim 19 (Original): The method of claim 18 wherein the roller is operated at low speed and high torque.

Claim 20 (Original): The method of claim 19 wherein the roller rotates at approximately 60 rpm.

Claim 21 (Original): The method of claim 19 wherein the roller has a torque of at least 2000 lb-in.

Claim 22 (Original): The method of claim 18 wherein the material is reduced to mulch without using cutting or impact blades.

Claim 23 (Original): The method of claim 18 further comprising rotating the roller in a first direction for mulching and rotating the roller in an opposite direction for unclogging a jam.

Claim 24 (Cancelled)

Claim 25 (Original): The method of claim 18 further comprising rotating the roller with an electric motor.

Claim 26 (Original): The method of claim 18 further comprising rotating the roller in opposite directions with a reversible motor.